

FY 2019 WINDOW SERVICE COSTS BY SHAPE

I. PREFACE

A. Purpose and Content

USPS-FY19-20 develops window service volume-variable costs by shape for market dominant Presorted First-Class Mail, USPS Marketing Mail Regular, and USPS Marketing Mail Enhanced Carrier Route (ECR). It contains electronic documentation of the spreadsheets and programs used to develop these costs.

B. Predecessor Documents

The most recent predecessor document was USPS-FY18-20 in Docket No. ACR2018.

C. Corresponding Non-Public Document

There is no corresponding non-public document.

D. Methodology

This analysis uses the same methodology as described in Docket No. R2006-1, USPS-LR-L-106. This methodology was also used in Docket No. ACR2018, USPS-FY18-20, and predecessor documents provided with the 2008 through 2017 Annual Compliance Reports.

E. Input/Output

USPS-FY19-20 relies upon the 2019 IOCS data set in USPS-FY19-NP21 and replicates cost distribution and cost pool assignment methodology in USPS-FY19-7. It also relies upon window service piggyback factors as developed in USPS-FY19-24, and ECR adjustment factors and volume inputs from USPS-FY19-26.

II. ORGANIZATION

The main results are presented in the Microsoft Office Excel workbook 'FY19 Window Service Costs.xls' in the worksheet 'FY19 Adj Costs.' These results are also reported in Table 1, below. Data sources are referenced in each spreadsheet in the Microsoft Office Excel workbook 'FY19 Window Service Costs.xls.' The programs and workbooks used to estimate these costs are described in the Program Documentation section below.

Table 1
FY 2019 Window Service (C/S 3.2) Costs (\$000)

Subclass	Shape	FY19 Costs	FY19 Piggyback Factor *	Adj FY19 Costs
First-Class Presort	Letters	21,115	1.3938	29,431
	Flats	1,589	1.3938	2,215
	Total	22,704		31,646
USPS Marketing Mail ECR - High Density/Saturation	Letters	2,748	1.3938	3,830
	Flats	2,396	1.3938	3,340
	Parcels	0	1.3938	0
	Total	5,144		7,170
USPS Marketing Mail ECR - Carrier Route	Letters	577	1.3938	805
	Flats	1,708	1.3938	2,380
	Parcels	0	1.3938	0
	Total	2,285		3,185
USPS Marketing Mail Regular	Letters	57,684	1.3938	80,400
	Flats	7,663	1.3938	10,681
	Parcels	960	1.3938	1,337
	Total	66,307		92,419

* Source: USPS-FY19-24; FY19Public.PB.xls, worksheet 'Window'

III. PROGRAM DOCUMENTATION

1. Computer Hardware and Software

The FORTRAN programs are run on a HP ProLiant DL560 Gen 8 with four Intel Xeon E5-4650 (each with 8 cores @ 2.70GHz) microprocessors and 256 GB of RAM. The operating system on this computer is Red Hat Enterprise Linux Server release 7.7 (Maipo) with the kernel 3.10.0-1062.1.2.el7.x86_64. FORTRAN programs are compiled using GFORTRAN from GNU Compiler Collection (GCC) version 4.8.5, which can be downloaded from <http://gcc.gnu.org/fortran> . The manual processing spreadsheet work is

performed on PCs running the Windows 10 (64-bit) operating system and using Microsoft Office Excel 1902 (64-bit) from Microsoft Office 365 (64-bit).

USPS-FY19-20 includes electronic versions of all relevant programs, maps, and data files. The compiler used to run the PC-based FORTRAN programs can be downloaded freely from <http://gcc.gnu.org/wiki/GFortranBinaries>. Download the Windows 64-bit version of GFORTRAN. To compile use the command line: x86_64-pc-mingw32-gfortran.exe -O2 -ffixed-line-length-132 -finit-local-zero -fbounds-check -o {executable name} {program name.f}. The PC-based FORTRAN programs should be run in the same order as the programs are described below.

2. Preparation of the IOCS Clerk and Mail Handler Data

The following program extracts clerk and mail handler tallies from the 2019 IOCS data set and prepares the tallies for the volume-variable cost distribution for both mail processing and administration/window service costs for clerks and mail handlers as described in USPS-FY19-7.

Program: **cadoc19_prc.f** – Separates the clerk and mail handler tallies from the entire 2019 IOCS data set, separates the tallies between mail processing and administrative/window service, and assigns a cost pool to each tally using the method described in USPS-FY19-7.

Input: **FY19 IOCS Data** – Text flat file version of the submitted SAS IOCS nonpublic data set (USPS-FY19-NP21)
iocs2019_np.h – Declaration of IOCS tally fields
mods_fins19.prn – List of MODS 1&2 finance numbers used to identify MODS 1&2 offices (USPS-FY19-7)
mods_fcn4_fy19.prn – Map of function 4 MODS operation codes which are assigned to Non-MODS cost pools
costpools19.prn – Map of mail processing cost pools

Output: **clk_mh_mp19.dat** – IOCS mail processing tallies
clk_mh_aw19.dat – IOCS administrative and window service tallies

3. Cost Estimates – Clerks and Mail Handlers, Window Service

The following FORTRAN programs replicate the function of the window service and administrative cost distribution SAS programs documented in USPS-FY19-7. The results of these programs are exported into Microsoft Office Excel where final results are summarized and reported.

Program: **admwin_set.f** – Prepares administration and window service IOCS tallies for the cost estimation program. Converts tally dollar values (F9250) to cost pool dollars and assigns the tally to a CAG category.

Input: **fincag.19** – List of tally finance numbers and CAG
iocs2019_np.h – Declaration of IOCS tally fields
clk_mh_aw19.dat – IOCS administrative and window service tallies

Output: **admwin19.dat** – Administrative and window service tallies used for the cost estimation for all office types

Program: **admwin2a.f** – Estimates the window service costs for clerks and mail handler tallies by activity code

Input: **iocs2019_np.h** – Declaration of IOCS tally fields
actv_intl_win19.prn – List of the direct and class specific mixed mail activity codes
admwin19.dat – Administrative and window service tallies used for the cost estimation for all office types

Output: **windist19.data** – Estimated window service costs by activity code

Program: **sumclass_win.f** – Rolls up the window service cost estimates from activity code to subclass

Input: **actv_intl_win19.prn** – List of activity codes and corresponding subclass category codes
classes_win19.prn – List of CRA subclasses
windist19.data – Estimated window service costs by activity code

Output: **wincost_cra19.csv** – Window service cost estimates for First-Class Mail Presort, USPS Marketing Mail ECR, and USPS Marketing Mail Regular by shape

Workbook: **FY19 Window Service Costs.xls** – Calculates FY19 CRA window service (C/S3.2) costs by shape

Input: **wincost_cra19.csv** – Window service cost estimates for First-Class Mail Presort, USPS Marketing Mail ECR, and USPS Marketing Mail Regular by shape
FY19 CRA Window Service Costs – CRA worksheet 3.2.1 and 3.2.2 (USPS-FY19-1, CS03.xls)
FY19 RPW Volumes – USPS-FY19-26
FY19 Piggyback factors by CRA cost segments - USPS-FY19-24
ECR HD/Saturation Adjustment Factor – USPS-FY19-26